Town of Dewey-Humboldt
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Standard Residential Guidelines

STRUCTURAL

The contractor shall make reasonable effort to locate and protect all existing and temporary utilities properly and work of other trades to avoid damage or personal injury.

Blue Stake – Contact two days before digging. Telephone 1-800 STAKE IT

The permittee is responsible for identification of all property lines. Footings will not be inspected until all property corners are properly pinned, flagged and easily identifiable to the inspector.

Approved numbers or addresses shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property, said numbers shall contrast with their background and be a minimum of 5 inches in size.

SITE WORK

Soil bearing value is assumed to be 1500 PSF unless classified otherwise by an acceptable Soils Report.

All stumps and roots shall be removed from the soil to a depth of at least 12” below the surface in the area to be occupied by proposed structures.

All wood forms used in placing concrete and other temporary supports for construction, shall be removed before the structure receives final approval.

All cut and fill work is to be in strict compliance with applicable grading ordinances and specifications.

FOUNDATION

Slabs on grade shall be at least 3-1/2" thick.

Under floor areas shall be ventilated by an opening of not less than 1 SF for each 150 SF of under floor area. Openings shall be arranged to provide cross ventilation and shall be covered with corrosion-resistant wire mesh of not less than 1/4" or more than 1/2" in any direction.

All footings shall rest 12" into undisturbed native soil or approved compacted fill 12" below grade for single story and 18" for two stories.

Where the surface of the ground slopes more than one foot in ten, footings shall be level or shall be stepped so that top and bottom are level.

On sloped lots, the bottom of the footing shall be a minimum five (5) feet from the face of the descending slope.

Backfill for all retaining / restraining walls to be pervious material backfilling not to begin until masonry or concrete walls have attended 14 days in place strength.

All footing bottoms shall be level and cleared of all loose material prior to concrete placement.

Foundation walls enclosing a basement or room below finished grade shall be damp-proofed on the outside using approved materials and methods.

Foundation plates or sills shall be bolted to the foundation with 1/2" diameter steel bolts embedded 7" into concrete or reinforced masonry. Bolts shall be spaced not more than 6' OC with bolts not over 12" from cut ends, both sides. Minimum 2 bolts per piece

Foundations supporting wood shall extend at least 6" above the adjacent finish grade. Provide minimum 18" clearance under wood joists and 12" clearance under wood girders.

All foundation plates or sills and sleepers on a concrete slab, which is in direct contact with earth, and sills which rest on concrete or masonry foundations, shall be pressure treated wood or foundation grade redwood.

Concrete for footings shall have a minimum compressive strength of 2000 PSI at 28 days.

Typical concrete coverage of reinforcing shall be as follows:

Concrete cast against earth	3"
Exposed to earth or weather larger than #5	2"
#5 and smaller	1-1/4"

Columns and posts which are subject to water splash (or in basements) shall be supported by concrete or metal pedestals projecting at least 6" above exposed earth and at least 1" above floor (or approved wood or natural resistance to decay to treated wood).

Grout: Minimum compressive strength of 2000 PSI at 28 days.

Mortar: Type "S" minimum compressive strength of 2000 PSI at 28 days, minimum 1 part cement, 1/4 to 1/2 parts lime and 2-1/2 to 3 parts sand by volume.

All concrete block to be grade "N'. Channels in block for bond beams shall be placed on the bottom side of block.

Joints in grout lifts shall be formed by stopping the pour 1-1/2" below the top of the uppermost unit.

No masonry shall be laid when the outside air temperature is below 40 degrees F, unless acceptable protection is provided to prevent freezing for 48 hours.

ROOMS

At least one exit door shall be 3'0" x 6'8" and capable of opening 50 degrees minimum. When area of the dwelling exceeds 3000 SF, two such exits shall be provided.

Every sleeping room below the fourth floor shall have at least one operable window or exterior door of emergency egress. Egress windows shall have a net clear opening of 5.7 SF. The opening to be 24" high minimum and 20" wide minimum with a sill height not exceeding 44" above finished floor. (NOTE: 20 x 24 does not meet egress).

Provide a landing at least as wide as the door width each side of the door, extending 36" in the direction of travel not more than 1" lower than the threshold.

Doors in dwelling / garage common wall to be 1-3/8" thick solid core or be 20 minute rated, with self closer. Door from garage may not open into a room used for sleeping purposes.

Provide one-hour fire rated 5/8" type "X" gypsum board on the garage side of dwelling / garage common wall with all joints taped, rated gypsum board to be continuous from floor line to roof sheathing or ceiling shall be covered with one layer of 5'8" type "X" drywall.

Ducts piercing one-hour rated walls between living unit and garage shall be of 26 gauge galvanized sheet metal with no openings into the garage.

Landings shall be provided at all exterior stairs. This landing shall be a minimum 36" in the direction of travel and a minimum width equal to the width of the stairs.

Corridors (hallways) shall have a minimum width of 36".

Residential stairs shall be 36" minimum width, 8" maximum rise, 9" minimum run, with 6'8" minimum headroom above the nose of the treads. A handrail, 34" to 38" above the nosing of the treads with intermediate rails spaced such that a 4" diameter object cannot pass through shall be provided.

Enclosed usable space under stairs shall be protected with one layer of 5/8" type "X" wallboard.

Provide attic ventilation with an area equal to 1/150 of the area on the attic. The area may be 1/300 provided 50% of the vents are 3" or more above the eaves or cornice vents.

Plastic roof skylights shall be placed on a curb 4" above the plane of the roof or be self-flashing.

Each habitable room shall be provided with natural light by means of open exterior glazed openings with an area not less that 1/10 of the floor area with a minimum of 10 square feet, 1/2 of which shall be open able.

Bathrooms, laundry room, etc. shall be provided with natural ventilation by means of open able exterior openings with an area of not less than 1/20 of the floor area with a minimum of 1-1/2 square feet or provided with mechanical ventilation system connected directly to the outside.

Unenclosed areas more than 30" above grade shall be provided with guardrail, minimum height to be 36", maximum opening between rails such that a 4" diameter object cannot pass through.

Sliding glass doors, windows and fixed glass panels extending within 18" of the floor shall be approved safety glazing materials, when 9 square feet or greater and the top edge more than 35" above floor and with walking surface within 36" of glazing.

Glazing within 24" of either edge of a door in a closed position, whose bottom edge is less than 50" above a walking surface shall be safety glazing.

Glazing less than 60" above the walking surface of a tub or shower shall be safety glazing.

Shower/Tub enclosures to be of shatter-resistant material. Hinged shower doors shall open outward.

Underside of kitchen cabinets located directly above kitchen range shall have 30" minimum vertical clearance.

Habitable spaces shall have a ceiling height of not less that 7'6".

No habitable rooms, other than a kitchen, shall be less than 7'0" in any dimension.

STRUCTURAL

Roof valley flashing shall be provided with not less than #28 gauge galvanized sheet metal and shall extend at least 8" from the center line each way and shall have a splash diverter rib

not less than 1" high at the flow line formed as part of the flashing, sections of flashing shall have an end lap of not less than 4".

Asphalt shingles shall not be laid on roofs with a slope less than 4:12; if the slope is greater than 2:12 but less than 4:12 asphalt shingles may be used if the shingles are sealed and two (2) layers of 15# felt underlayment are used, or provide the inspector with a copy of the manufacturer's installation requirements. Mineral aggregate surfaced, built-up roofing shall not be installed on a roof having a pitch of more than 3:12.

The truss drawings will be required by the field inspector at the time of rough inspection. When horizontal deflection of scissor trusses exceeds 0.25, truss connectors are required. Trusses over 35' span require stamp by Arizona Licensed Engineer.

Attic areas shall be accessible by an opening of not less than 22x30. With a furnace in the attic, the opening shall be not less than 30x30 or size required allowing removal of forced air unit (FAU) whichever is larger. Provide minimum 30" clear headroom above the access opening.

Provide draft stops in single family dwellings: When there is a usable space above or below the concealed space. Draft-stop shall limit concealed space to 1000 square foot or less, draft stop shall be installed to divide the space into approximately equal areas. Draft-stop material shall not be less than ½" gypsum board, 3/8" plywood, or other approved material adequately supported.
Nails may be box, common or deformed shank type meeting minimum design specifications for stress grade lumber and it's fastenings except that box nails shall not be permitted for fastening plywood. Nails exposed to the weather shall be galvanized.

Reinforcing steel shall conform to ASTM A-615 grade 40 steel, rust free, deformed intermediate billet steel bars.

Reinforcing steel shall be accurately placed and positively secured and/or supported by concrete blocks, metal chairs, spacer, or hangers. Lap splices shall, in no case be less than 30 bar diameters.

Bolt holes shall be 1/16" oversized. No bearing on threads will be permitted.

Every exterior wood stud wall and main cross partition shall be braced at each end and at least every 25' of length.

Floor joists and rafters more than 10" in depth and spanning more than 8 feet shall be supported laterally by bridging at intervals not exceeding 8'.

Floor joists shall be doubled under bearing partitions running parallel to supporting joists.

Provide approved fire blocking in walls at ten (10) foot intervals vertically and horizontally and at any horizontal projection from walls (soffits, etc.)

Rafter ties shall be spaced not more than 4' on center where rafters a ceiling joists are not parallel.

Provide positive mechanical fasteners at post/beam connections.

All joists, headers, beams, and rafters shall have a minimum solid blocking of 1-1/2" at each end.

All interior openings 4'0" wide or less shall have a minimum header of one 4x4 or two 2x4 on edge.

Provide a weather protective barrier under wood or hardboard siding.

Gypsum wallboard shall not be installed on exterior surfaces.

Water-resistant gypsum backing board should not be used in the following locations: over a vapor retarded material, in areas subject to continuous high humidity, on ceilings.

ELECTRICAL

Provide 30" minimum wide working space in front of electrical panel board (panel board shall be centered in that 30" space) and the working space shall have a dimension in the direction of access of not less than 36" (minimum headroom of working space shall be not less than 6-1/2").

Family rooms, dining rooms, and other habitable rooms shall be provided with receptacles so that no part of the wall is more than 6' from a receptacle. Wall sections 2' wide and longer shall be served by a receptacle and kitchen counter tops wider than 12" shall be served by a receptacle. Kitchen receptacles shall be installed so that no point along the counter wall line is more than 24" from a receptacle outlet in that space. Island or Peninsula counter tops shall have at least one receptacle for each four feet of counter top. Bathrooms, outside receptacle, garages, detached garages with electricity all receptacles within 6' of the kitchen sink shall be protected by ground fault circuit interrupters (GFCI).

Provide UFER ground or 8 foot ground rod.

Lights installed in all closets shall be 12" from shelving (measured horizontally) or be recessed.

Provide stair illumination.

A switch controlled light is required at all exits.

Provide electrical outlet to washing machine on separate 20 AMP circuit.

Smoke detectors shall be provided in each sleeping room and at access to all sleeping rooms, and when the sleeping rooms are on upper level, an additional smoke alarm is require at the center of the ceiling above the stairway. Smoke detectors shall be installed on each story and in basements; detectors shall sound an alarm audible in all sleeping areas. Smoke detectors shall receive their primary power from the building wiring and be equipped with battery back-up.

When additions, alterations, or repairs exceed $1,000 or when a sleeping room is added to existing "R" occupancies, smoke detectors shall be provided for the entire building.

Construction-site power for 125 v, 15 and 20 amp receptacles shall be GFCI protected and have a weather tight cover.

All electricity is temporary until a final inspection has approved the structure.

MECHANICAL

Every dwelling unit shall be provided with heating facilities capable of maintaining a room temperature of 70 degrees F. at a point 3' above the floor in all habitable rooms.

Fuel burning appliances shall be assured a sufficient supply of combustion air, one-half (1/2) of which shall be provided from an exterior source. Combustion air opening into attics shall extend six (6") above ceiling and joist insulation.

Water heaters located in attics shall be equipped with corrosion resistant water–tight pan fitted with a 3/4" drain to an approved location.

Plumbing vents and appliance flues shall terminate no closer than ten (10) feet from an air inlet, or shall extend three (3) feet above that inlet.

A 120 volt electrical receptacle shall be located within 25 feet of mechanical equipment.

At time of inspection, manufacturer's installation instructions, spec. sheets, evaluation reports and any other relevant data for woodstoves, prefab fireplaces, flues, chimneys, and all heating appliances shall be presented to the inspector.

All bedroom and bathroom doors shall be undercut 1/2" above finish floor material for return air, unless return air ducting is provided from room.

Elements of appliances in garages, which create a glow, spark, or flame shall be located on an 18" high platform and protected from mechanical damage.

PLUMBING

Shower stalls shall be 30” in least dimension with a minimum area of 1294 square inches.

Shower walls shall be finished to a height of 6’ with a smooth, hard non-absorbent surface.

Provide minimum clearance of 24” in front of and 30” in width for water closets.

Drainage pipe to be cast iron galvanized steel, galvanized wrought iron, copper brass, ABS, or PVC.

Provide trap access or non-slip joints for tube.

All under floor plumbing clean-outs must be located within 20’ of an access opening.

Fixtures with hose outlets shall be protected with approved integral backflow preventers (vacuum breakers).

Vent clothes dryer to exterior, 4” line minimum and 14’ maximum developed length.

Provide water heater with a 3/4” P&T valve and drain to the exterior.

Fuel burning water heaters are not permitted in or to have access through bedrooms, bathrooms, or clothes closets.

Two-way clean out is required at exterior of the building drain.

Access to furnace may not be through a bathroom or bedroom.

Flues from appliances shall have the required clearance to combustible material as per manufacturer’s requirements.

Minimum chimney height above roof, 2’ above roof within 10’ or per manufacturer’s specs

Forced Air Units (FAU) located in attics shall be equipped with a light, an outlet, a 24” wide walkway from the access opening to the FAU and a 30” deep working platform at the side of the FAU where servicing may be required.